

Overview

Useful For

Detecting drug abuse involving amphetamines, barbiturates, benzodiazepines, cocaine, ethanol, methadone, opiates, phencyclidine, and tetrahydrocannabinol

Detection and identification of prescription or over-the-counter drugs frequently found in drug overdose or used with a suicidal intent

This test is intended to be used in a setting where the identification of the drug is required.

Chain of custody is required whenever the results of testing could be used in a court of law. Its purpose is to protect the rights of the individual contributing the specimen by demonstrating that it was under the control of personnel involved with testing the specimen at all times; this control implies that the opportunity for specimen tampering would be limited.

Profile Information

Test ID	Reporting Name	Available Separately	Always Performed
CDA7X	Confirmed Drug Abuse Panel9, CoC, U	Yes	Yes
OXYSX	Oxycodone Screen, CoC, U	Yes	Yes
PDSUX	Drug Scrn, Prescription/OTC, CoC, U	Yes	Yes

Reflex Tests

Test ID	Reporting Name	Available Separately	Always Performed
AMPHX	Amphetamines Confirmation, CoC, U	Yes	No
COKEX	Cocaine and metabolite Conf, CoC, U	Yes	No
BENZX	Benzodiazepines Conf, CoC, U	Yes	No
BARBX	Barbiturates Confirmation, CoC, U	Yes	No
MTDNX	Methadone Confirmation, CoC, U	Yes	No
PCPX	Phencyclidine Confirmation, CoC, U	Yes	No
THCX	Carboxy-THC Confirmation, CoC, U	Yes	No
ETOHX	Ethanol, CoC, U	No	No

Test ID	Reporting Name	Available Separately	Always Performed
OPATX	Opiate Confirmation, CoC, U	Yes	No
OXYCX	Oxycodone w/metabolite Conf, CoC, U	Yes	No

Additional Tests

Test ID	Reporting Name	Available Separately	Always Performed
COCH	Chain of Custody Processing	No	Yes
ADLTX	Adulterants Survey, CoC, U	Yes	Yes

Testing Algorithm

Testing begins with screening tests for alcohol and drugs of abuse. Positives are confirmed and quantitated by definitive methods (gas chromatography-flame ionization detector for ethanol; gas chromatography-mass spectrometry for barbiturates, benzodiazepines, cocaine and metabolites, methadone, phencyclidine, and tetrahydrocannabinol metabolite; liquid chromatography-tandem mass spectrometry for amphetamines and opiates) at an additional charge. If only oxycodone screens positive, only confirmation of oxycodone with metabolite will be performed. Any other opiate positive screen will result in the full opiate confirmation being performed.

The drug screen, prescription/OTC will be performed by gas chromatography-mass spectrometry. Qualitative results will be reported.

Adulterants testing will be performed on all chain of custody urine samples as per regulatory requirements.

Method Name

CDA7X, OXY SX: Alcohol Screened by an Enzymatic Assay/All Others Screened by Immunoassay

PDSUX: Gas Chromatography-Mass Spectrometry (GC-MS)

ETOHX: Gas Chromatography-Flame Ionization Detector (GC-FID) (if appropriate)

NY State Available

Yes

Specimen

Specimen Type

Urine

Specimen Required

Supplies: Chain-of-Custody Kit (T282) containing the specimen containers, seals, and documentation required.

Specimen Volume: 30 mL

Collection Instructions: Collect specimen in the container provided, seal, and submit with the associated documentation to satisfy the legal requirements for chain-of-custody testing.

Additional Information:

1. Submitting less than 30 mL will compromise our ability to perform all necessary testing.
2. Not intended for use in employment-related testing.

Forms

[Chain-of-Custody Request](#) is included in the Chain-of-Custody Kit (T282).

Specimen Minimum Volume

25 mL

Reject Due To

All specimens will be evaluated at Mayo Clinic Laboratories for test suitability.

Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
Urine	Refrigerated (preferred)	14 days	
	Frozen	14 days	
	Ambient	72 hours	

Clinical and Interpretive

Clinical Information

This panel was designed to screen for and confirm by gas chromatography-mass spectrometry (GC-MS) or gas chromatography-flame ionization detection (GC-FID) the following drugs:

- Barbiturates
- Benzodiazepines
- Cocaine
- Ethanol
- Methadone
- Phencyclidine
- Tetrahydrocannabinol

Confirmation by liquid chromatograph-tandem mass spectrometry (LC-MS/MS) is completed for all opiates and

amphetamines.

This panel uses the screening technique that involves immunoassay testing for drugs by class. All positive screening results are confirmed by GC-MS, GC-FID, or LC-MS/MS, and quantitated, before a positive result is reported.

The panel includes PDSUX / Drug Screen, Prescription/OTC, Chain of Custody, Urine, which looks for a broad spectrum of prescription and over-the-counter drugs. It is designed to detect drugs that have toxic effects, as well as known antidotes or active therapies that a clinician can initiate to treat the toxic effect. The test is intended to help physicians manage an apparent overdose or intoxicated patient, to determine if a specific set of symptoms might be due to the presence of drugs, or to evaluate a patient who might be abusing these drugs intermittently. The test is not designed to screen for intermittent use of illicit drugs.

Chain-of-custody is a record of the disposition of a specimen to document who collected it, who handled it, and who performed the analysis. When a specimen is submitted in this manner, analysis will be performed in such a way that it will withstand regular court scrutiny.

Reference Values

Negative

Screening cutoff concentrations

Amphetamines: 500 ng/mL

Barbiturates: 200 ng/mL

Benzodiazepines: 100 ng/mL

Cocaine (benzoylecgonine-cocaine metabolite): 150 ng/mL

Ethanol: 10 mg/dL

Methadone metabolite: 300 ng/mL

Opiates: 300 ng/mL

Phencyclidine: 25 ng/mL

Tetrahydrocannabinol carboxylic acid: 50 ng/mL

This report is intended for use in clinical monitoring or management of patients. It is not intended for use in employment-related testing.

Interpretation

A positive result indicates that the patient has used the drugs detected in the recent past. See individual tests (eg, AMPHX / Amphetamines Confirmation, Chain of Custody, Urine) for more information.

[For information about drug testing, including estimated detection times, see Drugs of Abuse Testing at https://www.mayocliniclabs.com/test-info/drug-book/index.html.](https://www.mayocliniclabs.com/test-info/drug-book/index.html)

Cautions

Not intended for use in employment-related testing.

Clinical Reference

1. Physician's Desk Reference. 61st edition. Montvale, NJ. Thomson PDR, 2007
2. Goodman and Gilman's The Pharmacological Basis of Therapeutics. Tenth edition. New York, NY. McGraw-Hill Professional, 2001
3. Langman LJ, Bechtel L, Holstege CP: Chapter 35. In Tietz Textbook of Clinical Chemistry and Molecular Diagnostics. Edited by CA Burtis, ER Ashwood, DE Bruns. WB Saunders Company, 2011, pp 1109-1188
4. Principles of Forensic Toxicology. Second edition. Washington DC. AACC Press, 2003, p 385

Performance**Method Description**

Drug classes are screened by an immunoassay technique. All positive screening results are confirmed by gas chromatography-mass spectrometry, gas chromatography-flame ionization detector, or liquid chromatography-tandem mass spectrometry. (Unpublished Mayo method)

PDF Report

No

Day(s) and Time(s) Test Performed

Monday through Sunday

Analytic Time

2 days

Maximum Laboratory Time

5 days

Specimen Retention Time

2 weeks

Performing Laboratory Location

Rochester

Fees and Codes**Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact [Customer Service](#).

Test Classification

This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

CPT Code Information

80307

LOINC® Information

Test ID	Test Order Name	Order LOINC Value
PDSOX	Pain Clinic Drug Screen, CoC, U	In Process

Result ID	Test Result Name	Result LOINC Value
36262	Alcohol	42242-8
61727	Oxycodone	19642-8
36235	Drugs detected:	12286-1
36236	Suspect Drug	12286-1
36027	Chain of Custody	77202-0
36253	Amphetamines	43983-6
36258	Barbiturates	70155-7
36237	Chain of Custody	77202-0
36259	Benzodiazepines	14316-4
36254	Cocaine	43984-4
36260	Methadone metabolite	41858-2
36255	Opiates	70151-6
36256	Phencyclidine	14310-7
36257	Tetrahydrocannabinol	14312-3
36261	Chain of Custody	77202-0